

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF APPEALS

In re Patent Application of:)	
RUAT ET AL.)	
Serial No. 10/824,932)	Examiner: J. DSOUZA
Filing Date: APRIL 15, 2004)	Art Unit: 2611
Confirmation No. 7552)	Attorney Docket No.
For: ASYNCHRONOUS RECEIVER OF THE)	01RO12854443
UART-TYPE WITH TWO OPERATING)	
MODES)	

PRE-APPEAL BRIEF REQUEST FOR REVIEW

MS AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Responsive to the final Office Action of July 28, 2008,
and in connection with the Notice of Appeal filed concurrently
herewith, please consider the remarks set out below.

REMARKS

Applicants would like to thank the Examiner for the
thorough examination of the present application. Claims 1-6, 8-
15 and 17-23 remain pending in the application. Favorable
reconsideration is respectfully requested.

The Examiner rejected independent Claims 1, 10 and 18
over the Gulick et al. patent in view of the Applicants' Admitted
Prior Art, in view of the Sexton et al. patent, and in further
view of the Hong et al. patent.

In Re Patent Application of:

RUAT ET AL.

Serial No: **10/824,932**

Filing Date: **APRIL 15, 2004**

The Examiner cited Gulick et al. as disclosing an asynchronous frame receiver comprising a break character detection unit **412** (FIG. 21) for detecting the break character. The Examiner has taken the position that Gulick et al. also discloses a standard character processing unit for detecting standard characters.

As correctly noted by the Examiner, Gulick et al. fails to disclose an input for receiving asynchronous frames comprising standard characters, and a header comprising a break character with a data bit length greater than a data bit length of the standard characters. The Examiner referenced paragraph 5 and FIG. 1 in the specification (Applicants' Admitted Prior Art) as disclosing a header comprising break and standard characters.

The Examiner cited Sexton et al. as disclosing a header comprising a break character with a data bit length greater than a data bit length of the standard characters (column 3, lines 27-31). The Examiner correctly noted that Gulick et al. fails to disclose a break character detection unit comprising a first state machine, and wherein the standard character processing unit comprises a second state machine.

The Examiner cited Hong et al. as disclosing in FIG. 22 a state machine comprising a break character detection unit **198** and a standard character processing unit **202** (column 38, lines 1-41). As correctly noted by the Examiner, Hong et al. discloses that units **198, 202** are in a single state machine instead of separate state machines as in the claimed invention, but the Examiner references MPEP 2144.04 which states that separating elements to obtain the same function is not considered patentable, particularly if no new and unexpected result is produced.

The Applicants submit that new and unexpected results are obtained by having two separate state machines. For example, different operating modes are supported when the two state

In Re Patent Application of:

RUAT ET AL.

Serial No: **10/824,932**

Filing Date: **APRIL 15, 2004**

machines are separate. The first operating mode may be a conventional operating mode (in which only the second state machine is active), and the second operating mode may be an operating mode dedicated to protocols of the LIN type, for example, providing a break character BRK in a frame beginning. In the second operating mode, both state machines may be used in which the first state machine activates the second state machine after a character BRK has been detected.

In Hong et al., the Examiner noted that the break characters are clearly detected first in units **198** before unit **202** starts. This corresponds to the second operating mode in the claimed invention. However, for the first operating mode in the claimed invention, in which only the standard character processing unit (i.e., unit **202**) is to operate, the Examiner replied that this would be true in Hong et al.'s system as well if the state machines were separated.

The Applicants submit that the Examiner has downplayed the significance of separating the first and second state machines for providing the first and second operating modes. The cited prior art references fail to teach or suggest two separate state machines as in the claimed invention for supporting different operating modes. If separating the state machines in Hong et al. is obvious, then why hasn't it already been done since there is an advantage for doing so.

Since the units **198**, **202** in Hong et al. are in a single state machine instead of separate state machines as in the claimed invention, Hong et al. cannot support the first operating mode. This is because unit **198** feeds into and activates unit **202**. In addition, with the separate state machines as in the claimed invention, since the first state machine is configured to detect the break character within the header, it ensures a complete detection of the frame header before activating the second state machine for detecting the standard characters (when

In Re Patent Application of:

RUAT ET AL.

Serial No: **10/824,932**

Filing Date: **APRIL 15, 2004**


in the second operating mode). Reference is directed to paragraph 34 in the Applicants' specification.

With the single state machine in Hong et al. operating as both a break character detection unit **198** and a standard character processing unit **202**, there is the potential that the standard character processing unit **202** begins operation before the break character detection unit **198** detects a frame header. In sharp contrast, for the second operating mode of the first and second state machines in the claimed invention, the second state machine (i.e., break character detection unit) activates the first state machine (i.e., standard character processing unit) after the character break has been detected. This may not always be the case with Hong et al.

Accordingly, it is submitted that independent Claim 1 is patentable over the Gulick et al. patent in view of the Applicants' Admitted Prior Art, and further in view of the Hong et al. patent. Independent Claims 10 and 18 are similar to independent Claim 1. Therefore, it is submitted that these claims are also patentable over the Gulick et al. patent in view of the Applicants' Admitted Prior Art, and further in view of the Hong et al. patent. In view of the patentability of independent Claims 1, 10 and 18, it is submitted that the dependent claims, which include yet further distinguishing features of the invention are also patentable. These dependent claims need no further discussion herein.

In Re Patent Application of:
RUAT ET AL.
Serial No: 10/824,932
Filing Date: **APRIL 15, 2004**

Respectfully submitted,



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